

WHAT IS CLAIMED IS:

1. A coordinate input apparatus which detects three-dimensional position coordinates of an indicating tool, comprising:

5 detection means for detecting a three-dimensional coordinate value of the indicating tool which is defined in first, second, and third dimensions;

comparing means for comparing a coordinate value in the first dimension of the three-dimensional coordinate value with a predetermined value; and

10 control means for controlling outputting of coordinate values in the second and third dimensions on the basis of the comparison result obtained by said comparing means.

15 2. The apparatus according to claim 1, wherein said control means outputs the coordinate values in the second and third dimensions on the basis of the comparison result obtained by said comparing means.

20 3. The apparatus according to claim 1, wherein if the coordinate value in the first dimension is not more than a predetermined value, said control means outputs the coordinate values in the second and third dimensions.

25 4. The apparatus according to claim 1, wherein said control means comprises storage means for storing a first three-dimensional coordinate value detected at a first time point in an any period on the basis of the comparison result obtained by said comparing means, and controls outputting

of a difference between a second three-dimensional coordinate value detected after the first time point and the first three-dimensional coordinate value.

5 5. The apparatus according to claim 1, wherein said control means comprises storage means for storing a first three-dimensional coordinate value detected at a first time point in an any period when the coordinate value in the first dimension is not less than a predetermined value, and controls outputting of a difference between a second  
10 three-dimensional coordinate value detected after the first time point and the first three-dimensional coordinate value.

6. The apparatus according to claim 1, wherein said control means further outputs the comparison result obtained by said comparing means.

15 7. A control method for a coordinate input apparatus which detects three-dimensional position coordinates of an indicating tool, comprising:

20 the detection step of detecting a three-dimensional coordinate value of the indicating tool which is defined in first, second, and third dimensions;

the comparing step of comparing a coordinate value in the first dimension of the three-dimensional coordinate value with a predetermined value; and

25 the control step of controlling outputting of coordinate values in the second and third dimensions on the basis of the comparison result obtained in the comparing step.

8. The method according to claim 7, wherein in the control step, the coordinate values in the second and third dimensions are output on the basis of the comparison result obtained in the comparing step.
- 5 9. The method according to claim 7, wherein in the control step, if the coordinate value in the first dimension is not more than a predetermined value, the coordinate values in the second and third dimensions are output.
10. The method according to claim 7, wherein the control step comprises the storage step of storing a first three-dimensional coordinate value detected at a first time point in an any period on the basis of the comparison result obtained in the comparing step, and outputting of a difference between a second three-dimensional coordinate value detected after the first time point and the first three-dimensional coordinate value is controlled.
- 15 11. The method according to claim 7, wherein the control step comprises the storage step of storing a first three-dimensional coordinate value detected at a first time point in an any period when the coordinate value in the first dimension is not less than a predetermined value, and outputting of a difference between a second three-dimensional coordinate value detected after the first time point and the first three-dimensional coordinate value is controlled.
- 20 12. The method according to claim 7, wherein in the control step, the comparison result obtained in the comparing step
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is further output.

13. A computer-readable memory storing a program code for controlling a coordinate input apparatus which detects three-dimensional position coordinates of an indicating  
5 tool, wherein

the program code comprises:

a program code for the detection step of detecting a three-dimensional coordinate value of the indicating tool which is defined in first, second, and third dimensions;

- 10 a program code for the comparing step of comparing a coordinate value in the first dimension of the three-dimensional coordinate value with a predetermined value; and

- 15 a program code for the control step of controlling outputting of coordinate values in the second and third dimensions on the basis of the comparison result obtained in the comparing step.